

RAEV

BULLET X V2

User Manual



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1. Basic Information

1.1 Unpacking Information

1x Bicycle

1x Wheel

2x Pedals

1x Charger

2x Keys

4x Tools

1x User Manual



1x Bicycle



1x Wheel



2x Pedals



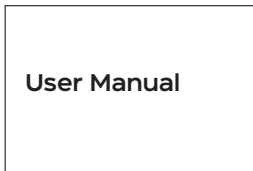
1x Charger



2x Keys



4x Tools



User Manual

1x User Manual

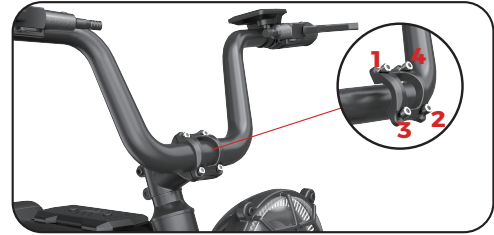
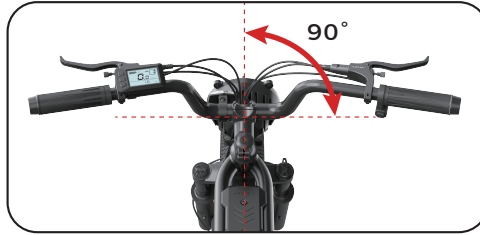
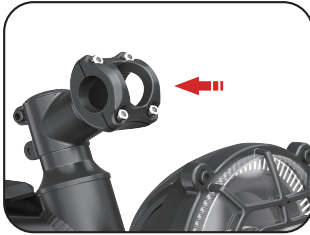
1.2 Parts Description



2. Installation Procedure

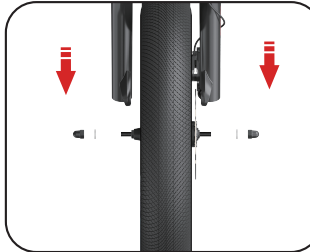
2.1 Handlebar Installation

- Loosen the pre-tightened set screws on the handlebar end cover using a 4mm socket head wrench.
- Position the handlebar into the designated opening, adjusting it to the desired angle.
- Close the end cover of the handlebar and secure it by tightening the four screws with the 4mm socket head wrench.
- Sequentially tighten the set screws on the handlebar end cover in the order of 1, 2, 3, and 4.



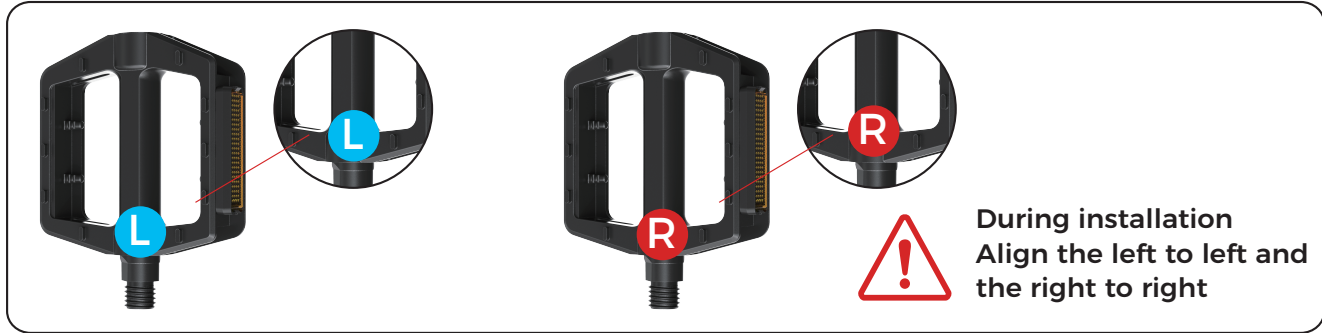
2.2 Front Wheel Installation

- Align the front disc with the space of the gateway lining, ensuring proper alignment of the front axle with the front fork axle hole, and securely insert it into the hole.
- Attach gaskets and cap nuts on both sides of the axle.
- Tighten the cap nuts on both sides using a 15mm open spanner to ensure a secure connection.

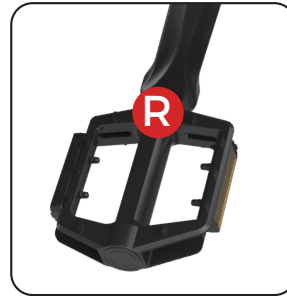
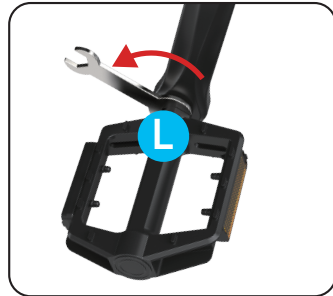


2.3 Pedal Installation

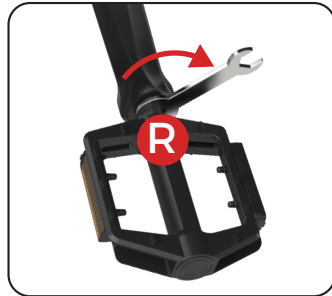
- Distinguish between the left and right pedals using the identifiers "L" for the left pedal and "R" for the right pedal.
- During pedal installation, make sure that the pedal bolt end face is perpendicular to the mounting hole of the crank. Tighten and secure the pedal using a 15mm open spanner.
- Note: When installing the left pedal, rotate it anticlockwise; when installing the right pedal, rotate it clockwise.



L



R



2.4 Battery Installation and Removal

- Insert the key, rotate it to the ON position, and position the battery in the designated slot on the body.
- Apply firm pressure to push the battery downward until it reaches the bottom.
- Rotate the key to the Lock position and then remove it.



3. Battery Charging

- Lift the flap placed over the charging port of the battery.
- Insert the charger plug into the battery's charging port and connect the other end to the power supply.
- The charger's status light will be red during the charging process.
- Once the battery is fully charged, the charger's status light will turn green.
- Remove the charger and close the charging flap.
- If charging while the battery is on the bike, please ensure the bike is powered off before initiating the charging process.



4.Riding Introduction

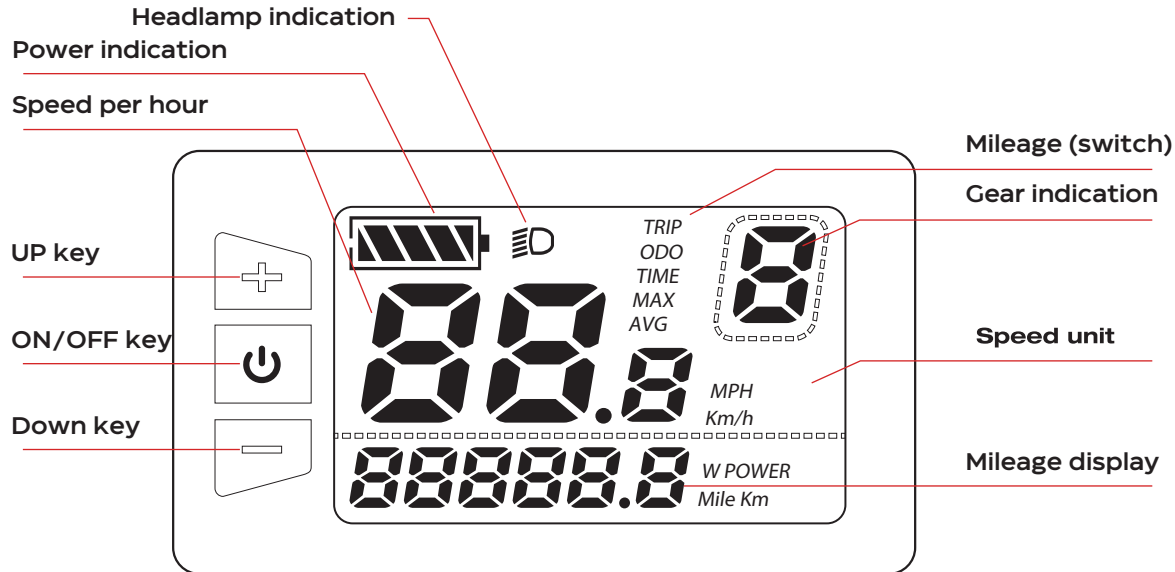
4.1 Riding mode

- Throttle or full electric mode: Press and hold ON. After the power turns on, adjust the gears (1-3) by \pm key, and twist the thumb shifter to enter the throttle or full electric mode.
- Pedal-assist mode: Press and hold ON. After the power turns on, adjust the gears (1-3) by \pm Key, and pedal for more than half a cycle to enter the pedal-assist mode.
- Manual riding mode: Press and hold ON. After the power turns on, adjust the gear to 0 by \pm Key and you will enter the manual riding mode.
- Note: The top speed is limited to 12mph in the first gear, 16mph in the second gear and 20mph in the third gear.



4.2 Introduction to Instrument Key Functions

- **ON/OFF:** Press and hold the ON button for more than 2 seconds to power on the system. Likewise, press and hold ON for more than 2 seconds to power off the system.
- **Ride Metrics:** A short press of the ON/OFF button when the bike is on toggles through different ride metrics, including total distance (mileage/h), trip distance (mileage/h), riding time (h), output power (W), total distance (mileage/h), maximum speed (mileage/h), and average speed (mileage/h).
- **± Key:** When the bike is on, press and hold the + button for 2 seconds to activate the instrument backlight and to turn on the headlamp. If the headlamp is on, press and hold the + button for 2 seconds to turn it off. Short press ± to switch among assistance gears (0-3) of the electric bicycle. Gear 1 indicates the instrument is on, while gear 0 represents parking mode with no motor output.



5. Precautions about Use

5.1 Compliance with Traffic Laws and Traffic Safety Tips

- Do not modify the electric bicycle without authorization. Make sure it is not overloaded beyond its load capacity of 150kg.
- Do not allow individuals who are not proficient in riding to use the electric bicycle to prevent potential injuries.
- Adhere to laws and regulations when transporting passengers or cargo on the electric bicycle.
- When operating the electric bicycle, the rider must wear a helmet, exercise caution, and refrain from holding the handlebar with no or only one hand.
- In adverse weather conditions such as rain or snow, increase braking distance by slowing down. Avoid riding the electric bicycle in stormy or severe weather whenever possible.
- During extended waits at traffic lights, shift to gear 0 or engage the brake instead of using the pedals for the purpose.

5.2 Safety Precautions about Electric Bicycle

- Do not park the electric bicycle in building lobbies, escape stairs, passages, or emergency exits.
- Avoid charging and parking the electric bicycle in residential buildings. Keep a safe distance from combustibles during the charging process and refrain from prolonged charging.
- Use and maintain batteries correctly. Do not dismantle waste batteries arbitrarily; instead, recycle them through relevant authorities.
- Familiarize yourself with the safe usage methods and warning signs of the charger. Ensure that the charger is compatible with the battery.
- To prevent potential accidents resulting from the wetting of internal electronic components and circuits, avoid washing the electric bicycle with water.
- During adjustments to the handlebar or saddle, ensure that safety signs on the handlebar pipe and saddle pipe are not exposed (if applicable).
- Regularly maintain the electric bicycle, scheduling maintenance every two times a year. For complex parts, seek maintenance services from a professional repair shop.

5.3 Preparation for Riding

- Ensure the power circuit and lights are functioning normally.
- Ensure the front and rear brakes are functioning normally
- Confirm that the handlebars, front, and rear wheels are securely tightened.
- Check and maintain the recommended tire pressure as indicated on the tire label.
- Check whether the lights or reflectors are damaged or polluted before driving.

5.4 Code Position Diagram

XXXXXXXXXXXXXXXXXX



(Frame bottom bracket)

6. Battery

6.1 Precautions about Use of Lithium Battery

- Ensure that the battery model is the original one before use. Do not use batteries from other brands without proper authorization.
- Check the lithium battery for any signs of damage, leakage, excessive heat, moisture, smoke, or other evident issues.
- For transportation safety, the battery charge is around 30% upon delivery. Due to power consumption during transportation and storage, it is normal for the battery to have a low charge or be completely discharged when used for the first time. Please do not be alarmed.
- Please charge the battery for 24h when it is used for the first time after being purchased or stored for a long time.

6.2 Operating Environment

- The optimal operating temperature range is 10°C to 45°C.
- At low temperatures, the battery capacity may decrease to varying degrees, as follows:
- The available capacity is about 70% at -10°C, about 85% at 0°C and about 100% at 25°C.
- If the battery exhibits any abnormal conditions such as emitting a peculiar smell, generating heat, deforming, or other irregularities, cease use immediately. Keep a safe distance from the battery and contact the after-sales service department promptly.

Warning

Battery is not a repairable part. In case of abnormalities, the battery may emit heat, give out smoke and cause a fire and explosion.

6.3 Charging Environment

- Charge the battery using the original charger. Avoid chargers from other brands or models.
- Charge the battery in a well-ventilated place at temperatures ranging from 0 °C to 40 °C, and keep it away from combustible materials.
- Adhere to the recommended charging time to prevent adverse effects on battery life and potential safety hazards.
- During the charging process, expect the battery capacity to increase rapidly initially and then slow down. This is a normal safety procedure.
- Avoid charging the battery outdoors in severe weather conditions.
- If the surface temperature of the battery box exceeds 55 °C during the charging process, it indicates a breakdown. In such a case, immediately power off and take the battery to the designated repair station. It is normal for the charger box to be slightly warm during charging.

6.4 Storage Environment

- After the battery is installed, its capacity will gradually diminish during operation. A fully charged battery should not be left unused for more than two months, and a drop in battery capacity displayed on the instrument is normal.
- When the battery remains unused for an extended period (over a month), please remove it from the electric bicycle. Charge the battery to 50% (after fully discharging, charge for 1.5-2 hours using the charger). Store the battery in a cool, dry place with an optimal temperature range of 5 °C to 25 °C, and keep charging it for about 3 hours every two months.
- Store the battery and charger in a clean, dry, and well-ventilated place, away from corrosive substances, ignition sources, and heat (at least 2 meters away). Disconnect them from combustibles.
- Maintain the optimal battery capacity at around 50%. If the battery is stored for a prolonged period with a capacity lower than 10% or higher than 90%, irreversible capacity loss may occur.
- Avoid storing the battery in elevated locations, as a fall may result in uncontrollable internal damage, leakage, heat, smoke, fire, or explosion.
- Protect the electric bicycle and battery from rain, ice, snow, and chemical substances during use and storage. Do not wash with water to prevent potential accidents caused by wetting internal electronic components and circuits.

7. Technical Parameters

The maximum mileage is determined under specific conditions: a fully charged battery, a net load of 70kg, a temperature of approximately 25°C, and a constant speed of 12mph in gear 1 on a flat road surface in a windless environment. Please note that actual maximum mileage may vary based on factors such as load, temperature, wind speed, road surface, operating habits, and other variables.

Product name	Bullet X V2
Net weight	79.3lb./36kg
Product size	69.7*26.8*42.5in.
Packaging box size	60.6*14.8*34.6in.
Maximum gradient	12° (load 220lb.)
Load capacity	330lb./150kg
Maximum	Electric mode 20mph/32km/h
Endurance mileage	25miles/40km
Motor	500W
Battery capacity	48V13Ah
Charging voltage	90-264V
Wheel diameter	20in.
Charging time	6.5hours
Waterproofing grade	IPX4
Storage temperature	20°C-25°C/68°F-77°F
Operating temperature	-4°F-140°F/1-20°C-60°C
Charging temperature	32°F-104°F/0°C-40°C
Warranty	2 Year Limited

8. Parameter Settings

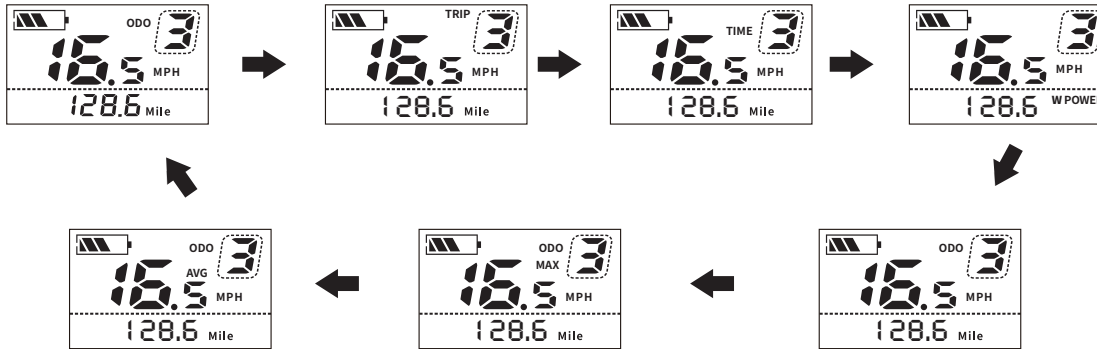
ON/OFF

Long press the power button to turn the power on. When power is turned on, long press power button to turn the power off.

*When there's no usage in 10 mins, the power will turn off automatically.

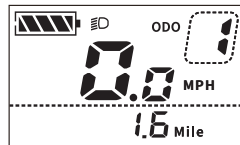
Control Panel

When the power is turned on, short press power button to choose between the following: Speed (MPH), Single Mileage (Mile), Riding Duration (Hr), Output Wattage (Watt), Total Mileage (Mile), Max Speed (MPH), Average Speed (MPH).



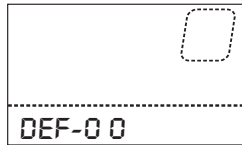
Turn On/Off Display Backlight and Light

Long press UP for 2 secs to turn the headlight and control panel backlit light on or off.



Reset Settings

Press both UP + Power button for 2+ seconds to enter the reset interface, press UP/DOWN to choose between Y/N. To reset settings, select Y and long press Power button for 2+ seconds to save the settings, the display will show def-00.



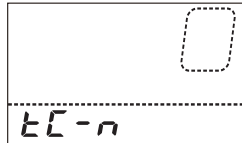
Parameter settings 1

When power is on, long press UP+DOWN for 2 seconds to enter the settings.

*Settings must be done when the bike is stationary.

Rest Single Mileage

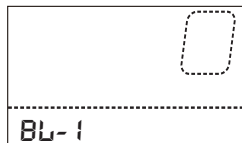
Enter TC. Use UP/DOWN button to choose between Y/N, Y to clear single mileage. N to stay the same. Long press the power button to save the settings.



Backlit Lighting

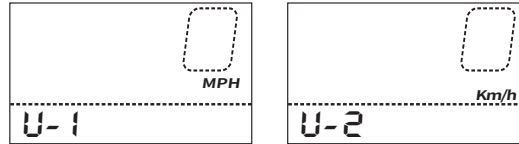
Enter BL to change the backlit lighting. Choose between 1, 2, 3. 1 is the darkest, 2 is standard. 3 is the brightest.

Default setting is 1. Press UP/DOWN button to change the lighting setting.



Km/Mile

Enter U. Press UP/DOWN to change the unit settings, short press power button to go back to the previous settings. Long press power button to save the settings. Default setting is Km.

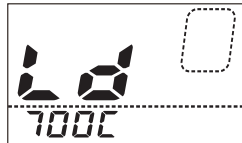


Parameter settings 2

Press UP+DOWN for 2 seconds, to enter the settings. Press DOWN+POWER for 2 seconds, to enter the wheel diameter settings.

Wheel Diameter

LD indicates the wheel diameter. The default wheel diameter is 24inch.



9. Error code and FAQs

Code	Definition	Solution
21	Current Malfunction	Check controller
22	Throttle Malfunction	Check throttle connection
23	Motor Malfunction	Check motor cable connection
24	Hall Signal Malfunction	Check motor cable connection
25	Brake Malfunction	Check brake levers and the brake cut off cable

9.1 Error code

Individual special examples:

- **Error code 21**

The current is abnormal or the controller is malfunctioning.
To resolve it, replace the controller.

- **Error code 22**

Throttle malfunction.
To resolve it, unplug and reconnect the throttle cable. If the issue persists, replace the throttle.

- **Error code 23/ Error code 24**

Motor malfunction.
To resolve it, unplug and reconnect the motor cable. If the problem persists, replace the motor.

- **Error code 25**

Brake lever malfunction.
To resolve it, unplug and reconnect the brake cable. Check if the brake lever returns to position. If the problem persists, replace the brake lever.

- Error code 30
Communication malfunction.
To resolve it, unplug and reconnect the control panel cable, and the controller to the main cable connector.
Check if the pins in the connector are bent or damaged. If the issue persists, there could be a problem with the following components: control panel, main cable, or the controller.

9.2 FAQs

- Battery is turned on, but there is no power supply
Check if the display is properly plugged
The battery might be undercharged, so charge the battery
- The power is turned on, but the motor doesn't work when twisting the throttle
Check if the brake lever is in the braking position
Release the parking mode if it is in Gear 0
- Insufficient mileage
Check if the charger is damaged
Before riding, always check the tire pressure
Check if the battery is damaged
- The battery cannot be charged
Check if the charger is damaged. If it is, you need to replace the charger
Check if the battery is damaged
- No display on the control panel
The battery might be undercharged, charge the battery
Check if the plug is loose

RAEV

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